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ORIGINAL ARTICLES.

Syphilis.

BY R. E. MCVEY, M.D., TOPEKA.

Read before Topeka Academy of Medicine and Surgery, April 12, 1897.

Syphilis is an infectious chronic disease. The character of the disease, the mildness or severity of its manifestations, their multiplicity, succession and duration is determined in a great measure by the constitutional peculiarities of the patient. When syphilis virus is introduced into the system there is no appreciable evidence of its action until from three to four weeks, when the chancre makes its appearance. The duration of the primary stage is six to eight weeks.

After the chancre makes its appearance the virus is conveyed to the lymphatic glands. Whether the whole lymphatic system is involved at first, after the appearance of the chancre, it is not definitely settled. I think probably both the superficial and deep glands are involved. But the inguinal glands being nearer the seat of local infection manifest the presence of the poison more markedly than the others. As just how the virus enters the constitution, whether at first through the blood vessels or through the lymphatic vessels has not been entirely settled. The probability is that the blood is infected through the lymph channels by the way of the thoracic duct. The oxyhæmoglobin of the blood corpuscle is diminished while the leucocytes are increased in number. Through these two sources the entire system becomes saturated and especially the skin. The papillary layer of the skin becomes infiltrated with lymph cells which results in an inflammatory condition of this layer from exudation of the lymph. The first manifestation of this condition is an erythematous rash which makes its appearance under the clothes, being painless and not itching, it sometimes escapes the patients attention, and may pass off without his being aware of there being any secondary symptoms. the disease having exhausted itself without any further skin manifestations. When this is the case we cannot be sure that the patient has constitutional syphilis.

When there has been fever preceding the rash, accompanied by pains and aching in the bones and other neuralgic symptoms, we expect that this first blush will be followed by the papular form of the eruption upon the skin, which is the typical form of the secondary manifestations. The papular form of the eruption involves the deeper layer of the skin. The papillary eruption makes its appearance from three to four months after the initial lesion. Its duration is from six months to two years. At first it is of a dark red color, having the appearance of the chancre, but later it changes its color, getting paler and assuming more of a copper appearance. The papule represents the type of neoplastic lesions, but all the varieties of the syphilitic papule cannot be followed out in a short paper like this.

The moist papule is of special importance. It represents the metamorphosis of the ordinary papule which is determined by the accident of situation. Its development is favored by fineness of skin and consequent thinness of the epidermis and contact with secretions and excretions. It is found at the junction of the skin with mucous membranes. Upon the skin side this papule is

and spinal cord does not yield to the iodides and the question to decide is whether the patient is suffering from the local effects of the syphilis or from the mercury which has been absorbed. Taking this view in these cases it may be the mercury and not the syphilis that we have to contend with. I have used 1.30 of a grain of strychnia and three or four drops of dilute phosphoric acid after meals. This quickens the action of the cells in the brain and spinal cord, producing a more healthy action, invigorating them and serves me better than the iodides.

I believe syphilis to be a disease of self-limitation and a large per cent. of the cases will recover without any treatment. In Spain they do not use mercury. The climate alone seems to cure the disease, and during the seventeenth century, when mercury failed, the patient was sent to Spain.

In the United States Hot Springs is the great Mecca for all the highly syphilized patients.

Tuberculosis.

H. H. Speers, M.D., in The Cincinnati Lancet-Clinic.

As my view of the origin of tuberculosis is at variance with established teaching, perhaps a simple statement of belief is necessary.

1. Tuberculosis is a constitutional disease, dependent largely on the evils of civilization, and governed by the following law: The death-rate from tuberculosis is in direct ratio to suspension of atmospheric influence.

2. The suspension or abeyance of atmospheric influence may take place from within or from without. From without through impure or impoverished atmosphere; from within through defective lung tissue, original or acquired.

3. Abeyance or atmospheric influence, in whatever way induced, causes a depraved tissue or dyscrasia, through which the tubercle bacilli enter and grow.

4. The growth of tubercle bacilli, being dependent on the precedent state or condition of the individual, is never *per se* the primary cause of tuberculosis.

5. Tuberculosis may exist, though infrequent, in the absence of tubercle bacilli, but can never exist without the precedent state or condition.

6. The plant growth being a secondary condition or modifying influence in this most fatal disease, treatment directed against this growth must ever remain barren of permanent curative results and dangerous to the patient.

7. The precedent or primary condition being subject to law, and under control, tuberculosis in under control.

A question is anticipated. If tubereulosis be under control, why don't you control it? *Why don't you control it?*

The control of tuberculosis pertains to no one physician, only in pointing out the way. These seven propositions point the way, and on these the writer rests.

Syphilis and Paresis.

Quarterly Journal of Inebriety.

In a paper on hereditary syphilis and general paresis in the insane, by Dr. Williams, occurs the following most significant passage:

"Practically 75 per cent. of all cases of general paralysis exhibit proof of primarily syphilitic infection." The history of all cases is "the typical man of the world," ambitious, fond of society and high living, a light sleeper, and a heavy drinker, then come delusions and well-marked paresis." Four cases are noted where syphilitic teeth were prominent, although no history of syphilis could be obtained. Each one had used spirits freely. The pathological conditions in chronic inebriety, syphilis, and paresis, are all alike. The thickened membranes and meningeal changes are the same. The neurosis which predisposes to insanity, paresis, or inebriety may be of syphilitic origin. A history of using alcohol exists in all cases of paresis, and it is significant of contributing causes not yet studied.

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Topeka, Kansas, Saturday, April 17, 1897.

IT seems to be a fact in the history of the medical profession that most every man of any sort of ability has a period of popularity and successful business, and no less a fact that his popularity and his success is of only a few years duration. This has been noted by many observers both among the profession and the laity. It is not to be greatly wondered at if one stops to think what a very extensive practice means. The man whose business occupies all his time has little left for study, his journals are unread, and his books are seldom touched except from necessity. While his popularity is at its height he is losing valuable ground because he has no time to keep posted. Others who have less business and are studious soon supersede him in ability, and before he really expects it his reputation wanes. The best physicians are not always those who have the largest business. The history of any physician who is too busy to read the journals and has no time to attend the meetings of his medical society, can usually be told in a few short years. The men whose standing in the profession is high and who have the confidence of the people, can only maintain their position by constant effort and by taking advantage of every opportunity to increase their knowledge and better equip themselves for the work. The man who writes a paper for his society does not do so as a matter of accommodation, but for his own benefit. It does not always impress his brethren in the profession with his superior knowledge, but if he has been fair to himself he has been careful to study the subject of his paper from every standpoint, something he probably would not have done otherwise—and in this way he has benefited himself if in no other.

The Imbecile Question.

About three years ago eleven boys were castrated at the Winfield imbecile aylum. One year later twelve more were castrated. The report of the superintendent of the asylum for that year, 1894, is self-explanatory and is as follows: "The most aggravating and difficult condition which has confronted the management of the institution was the number of inmates who were confirmed masturbators. Having exhausted 'moral suasion' and every other device known to prevent or cure this horrible practice, I called in consultation three of the most eminent and learned physicians and surgeons in the vicinity, and, after a thorough examination and careful study of each person so afflicted, we decided that a surgical operation was the only means by which a cure could be effected. Accordingly one of the most debased victims of that habit was operated upon. The boy did not seem to suffer any from the after effect, but as a precautionary measure he was kept in bed seven days, and during that time did not miss a meal. A marked improvement both mentally and physically

was the result. After three weeks time he was sent home, and I learned through a letter from his father, that he was making a full hand on the farm. After about one month's time we operated on three more boys, with the same results, and after about one month from the time of operating on the last ones, we operated on seven more, making in all eleven cases, with a very marked improvement in nine of them mentally, and all of them physically. The nine are improved to that extent that we have transferred them to the kindergarten class, where they are making very satisfactory progress. Five parents have visited the institution since those operations were performed, and after observing the marked improvement in the boys above mentioned, gave me a written request to operate on their boys at my earliest convenience. I believe every parent in the State who has children here, after examining into the condition of the boys operated on and seeing the improvement in their condition, would have the same treatment applied to their boys."

Since the above report has been made twelve more boys have been operated on and they all have been benefitted mentally, physically and morally. We have made diligent inquiry of physicians living in the vicinity of Winfield as to the facts in the case of these boys and find that the superintendent's claims are true. The time has come when the physician must make himself heard and his influence felt in showing the people the "way out" of this burdensome dilemma.

All over the land we find men and women devoting their time, labor and money to looking after, caring for and trying to make these unfortunates comfortable and happy. This is commendable, praiseworthy and the noblest christianity. The condition of these unfortunates appeals to the sympathy of man; it touches the tender cords of pity, kindness and love, the nobler attributes of human nature. These philanthropists deverve the highest praise for their work and the assistance of the people at large and the Government and State.

But these unfortunates are increasing. Within a few years their number will be so great that it will become a burden to the State. By unfortunates now we mean not only the imbecile and demented youth but the insane and the confirmed criminal classes. Statesmen and philantropists have in a measure devised plans and provided means for these classes of people, but it cannot be done much longer without becoming a burden of great magnitude, and especially so when the number increases from year to year. The questions suggested by the facts as set forth in the foregoing are: first, what is the cause of the present condition of these people; second, how best to deal with this class; third, how to prevent its increase; fourth, whose duty is it to care for them and prevent their increase; fifth, how can this be brought about? J. E. M.

AMONG the special features of the next meeting of the State Society are a paper by Dr. J. H. Eastridge, of Chicago; a paper by Dr. W. H. Petro, of New York; and a paper on "Hernia," by Dr. Bannister, of the U. S. A. at Ft. Leavenworth.

THE program for the State society meeting is nearly complete, and it is an exceptionally good one. Many good papers are promised, and inasmuch as the papers will all be arranged to be read in the general session everybody will be benefited.

DR. G. H. BROWN, of Chanute, Kas., was unanimously re-elected Supreme Medical Examiner of the Patriarchs of America at the meeting of the supreme lodge in Chetopa this week.

DR. G. A. WALL, the recording secretary of the Kansas Medical Society, and who is now in New Mexico, will be unable to attend the next meeting of the State society.

THE *Columbus Medical Journal* has removed from 150 E. Broadway to its new quarters 68 Butler Avenue, Columbus, Ohio.

THE College of Physicians and Surgeons, of Chicago, has recently become the medical school of the University of Illinois.

THE program for the Eastern Kansas Society has been issued. The meeting will be held in Kansas City, Kas., April 20.

DR. PILCHER has received the appointment as superintendent of the imbecile asylum at Winfield, Kas.

Topeka Academy of Medicine and Surgery.

April 12 at 8 p.m. the Academy was called to order by the president, Dr. Barnes.

Members present were Drs. R. E. McVey. J. E. Minney, D. K. Longshore, O. P. Davis, D. E. Esterly, W. A. Wehe, I. C, Barnes, H. E. Adams, L. M. Powell and S. G. Stewart. Guests, Drs. L. C. Duncan, MaBelle True and Julia Niles, Miss Cloyd and Mr. Law.

The first paper:

"Syphilis"—Dr. R. E. McVey (see page 211).

Dr. McVey's paper was followed by Dr. D. E. Esterly.

"Some Syphilitic Affections of the Anterior Portion of the Uveal Tract."

The discussion of Dr. McVey's paper was left until Dr. Esterly had read his, when the discussion of both was taken up.

Dr. Minney—Dr. McVey has not undertaken to cover the entire field. There is no tissue of the body that may be affected. So far as our experience goes we like to have an iritis come to us when the rash is out. When you have an advanced case of syphilitic iritis you have there an exudate that has bound down the iris. And the man who fails to recognize such a case makes a serious mistake. An iritis of that character has no tendency to recover. With local and general treatment you may have complete resolution. There is a characteristic appearance of these syphilitic papules which appear at the border of the iris. If you undertake your treatment early the adhesions melt away. It is diffcult to differentiate between this and rheumatic iritis. The physician should tell his patient of the debilitating character of the disease.

In the iritis, if in addition to the atropine you apply hot fomentations you will get results that you will not otherwise get. There is nothing that takes the place of the atropine. I have seldom exceeded two to four grains to the ounce. As for internal treatment we usually use the mixed treatment along with the atropine and hot applications.

Hypodermics of morphine and also the use of coal tar preparations are necessary. I do not understand why blood should be let from the mastoid more than from any other part. I do not get the results that others have obtained by this means. Iritis in hereditary syphilis seldom comes without keratitis.

Dr. Stewart—The doctors idea is that syphilis is a self-limited disease, but I do not think it would be good practice to rely upon that. It seems that the poison of syphilis fastens itself upon the individual who has the power of remaining latent. Persons who have had the first lesions and have thought themselves cured have had a return of the disease which has gone on finally causing death. Persons who have had syphilis should never marry. As to the form of the disease that is hereditary I have in mind a family of bright children, who, on reaching puberty one after the other died of syphilitic disease of the lung. The destruction of a lung may progress rapidly while the victim remains in good nutrition. As to pathology, syphilis fastens itself upon tho blood vessels, which are thickened and occluded or destroyed, cutting off nutrition to that

part. Gumma may be found in any organ. If we introduce into the system some agent before these changes take place we may have a recovery. Mercury and the iodides I think do their most good by reason of the increased nutrition of the cells. Don't wait for second stages, begin at once, just as soon as you make the diagnosis. I usually use the mixed treatment. Dr. Esterly speaks of using hypodermically the bichloride of mercury. Twenty years ago I used that, and very successfully, but it is a very painful treatment. I am now using the suc. of mercury, and with good results. It is not very painful when used along the gluteal muscles. When there is an iritis local treatment must be carried on.

I have recently had a case coming to me during the secondary stage with an iritis. I dilated the pupils with atropine and that exposed the adhesions which were taking place. If the atropine had not been used the eye would have been ruined.

Dr. Longshore—I had it so thoroughly impressed upon me while in the hospital at Philadelphia that I think that when a person once had syphilis, he always has it.

Dr. Powell—I do not like to get hold of a case of syphilis. I think we have much fewer cases of syphilis here than are found in the East.

Dr. Wehe—When a man is inoculated he has syphilis already. I had a little scare not many months ago when I had a patient who had the tertiary stage coming on during the second stage, and there was a hole in the hard palate almost before I knew it. I had an experience with a man who fell on the avenue here and was picked up as drunk. He had tertiary brain lesions and had a facial paralysis. I put him on 60 grains of the iodide and 1.60 corrosive sublimate and in ten days he began to get better.

Dr. Davis—One of the most interesting phases of the subject has scarcely been touched upon. Where there is involvement of the central nervous system it is especially interesting because the history of the case is hard to obtain. The primary lesions may have occurred twenty or thirty years before. There is a great multiplicity of nervous symptoms in syphilis. One characteristic of syphilitic brain lesion is the tendency to improve. The exudation may be partially absorbed. The painfulness of the injection of the bichloride may be obviated by injecting a four per cent. of cocoaine and then attaching the hypodermis of bichloride to the same needle before removing it.

Dr. McVey—I am glad you have had such a free discussion. I hope you will all study syphilis. If I had syphilis and was to be treated by a man who did not know all about it, I would rather have the syphilis than the treatment. The disease has been cured. If I had a syphilitic iritis I would be slow to let any one operate on my eye. I hold that an operation would be very dangerous. Another point, I would not let any man give me mercury in the tertiary stage. Mercury produces trembling and appoplexy. The papule belongs to the primary and the gumma to the tertiary stage.

Dr. Esterly—In regard to the letting of blood over the mastoid, it is probably empiric. There a large train of nervous symptoms arising from syphilis. As to operations, I would not hesitate. If you don't operate the eye will be lost. If you do operate you give the man a shadow of a chance.

Dr. Minney—I want to say one thing for Dr. Powell, I have thought that since the prohibitory law syphilis has been lessened, now I think it is on the increase. We never are without some cases. I think as long as saloons increase the disease will increase.

HARRIET E. ADAMS, M.D.,
Secretary.

IDA C. BARNES, M.D.,
President.

The Early Diagnosis of Tuberculosis.

Maryland Medical Journal.

Whether the diagnosis of tuberculosis in its early stages is simple or not, depends upon what is understood by "its early stages." It is, therefore, rather questionable teaching, says the *Medical News*, to

maintain that the signs observed even in the earlier stages are easily enough recognized by the merest tyro in ausculation. That localized dulness at the apex, the prolonged high-pitched expiratory murmur, the circumscribed rales, the hemoptysis and the dry, hacking cough, are too significant to leave any doubt in the minds of the most casual observer, is true enough. But who in these days would think of regarding such physical signs and symptoms as indicative of an early stage in tuberculosis!

It is indeed commendable in our "merest tyro" to make a diagnosis even at this juncture, and he is to be encouraged in his desire to make such diagnosis, but he must not, by this flattering success, be deluded into the belief that he is recognizing phthisis in its early stage, or hope thereby to stay the progress of the disease. Our "tyro" must be informed that more modern methods of investigation have discovered instruments of such precision and tests of such reliability and accuracy that they discount by many weeks and months the date at which the stethoscope is of diagnostic value. The persistent presence of tubercle bacilli in the sputum of a patient, even when all other diagnostic signs are absent, is a menace to his welfare, and must be reckoned with by the attending physician. On the other hand, localized dullness in the lungs, with prolonged high-pitched expiratory murmur, and circumscribed rales, with cough, fever and emaciation, have been confidently conducted to a successful issue, when repeated examination has shown an absence of the bacilli from the sputum.

But a still more delicate citerion, and one that is rapidly coming into use among experts is the tuberculin test. Koch has used this with most reliable and satisfactory results in five thousand cases in which physical signs were absent and in which bacilli could not be discovered in the sputum. The Health Board has also been using it in suspicious cases, in which all other tests proved negative, with most gratifying results as to the accuracy of its revelations. And Dr. Trudeau of Saranac, in a recent personal interview, declared that after careful and long continued observation he had come to regard the presence or absence of reaction after tuberculin injections as the final and decisive test in cases of supposed cure. In the cases of patients who no longer present any clinical evidence of the disease, it is getting to be his custom before declaring them cured and consenting to their return to former homes and occupation, to subject them to the tuberculin test. When no reaction occurs the patient is pronounced cured, but when the characteristic phenomena are present the clean bill of health is refused. In a paper presented recently before the New York Academy of Medicine, the same authority said: "If there is expectoration and the presence of the bacillus cannot be detected by repeated and thorough examinations, a positive conclusion can often be reached within three weeks by the inoculation of the expectoration in the guinea-pig, and when there is no expectoration, by the tuberculin test."

Professors of Books and of Medicine.

Pacific Medical Journal.

It was Emerson, I believe, who said that we had plenty of libraries and of books, but that we lacked the knowledge of books. The same may be said of medicine; while our colleges are multiplying the number of their professorships, adjunct professorships, and instructors and demonstrators, or lengthening the college terms of study, no college or university has as yet given the subject of medical history, medical bibliography, or of the philosophy of medicine a deserved notice.

It is a fact worthy of note that all the men who have left their mark upon our art in the United States, have been such as have of their own will followed such a course of study. A knowledge of French is here indispensable, as most works dealing with the philosophical history of medicine are in French, or have been translated from the Italian, Spanish or German languages into the French. For this reason I would

advise all intending medical students who wish to become masters in their art, to well study the French languages.

For some inexplainable reason the English and American profession has paid but little attention to the subject. While erudite English and American medical men are as well grounded in the history and general philosophy of their art as their brothers in continental Europe, we can hardly say that the average of the practitioners of England or America are as well grounded in the same line as the same class of practitioners on the continent. This is largely owing to the want of proper direction whilst pursuing the study of medicine, and that the original chair filled by the late Professor Robley Dunglison, which he was pleased to call that of the "Institutes of Medicine," first established in the University of Virginia, and later on in the Jefferson Medical College of Philadelphia, has passed almost entirely out of usage. Professor Dunglison was wont to give to the medical mind of the student a philosophical groove from which it would survey every branch of medicine, making mere technique subordinate to the appreciation of principles.

The English language is not barren of works that are educating in this line of study, and which should assist or supp e-ment the course of mere medical or surgical instruction, but our faculties or college directors seem to have overlooked this important educational branch of medicine by their neglecting to appoint appropriate chairs for their interpretation. Such an education will prevent one from becoming too routinic in his practice, or a slave to technique or forms at the expense of principles, just as too much theology causes the utter disappearance of many that otherwise would have been good Christians. The training of the mind to reflection, comparison and to analyzing that such a course would ensure is far more educating than the mere memorializing of symptoms, exhaustive laboratory work and successive steps of an operation, as while a well drilled physician or surgeon challenges our admiration, we cannot help but realize that many of these well drilled machines too often utterly lack that reflective sense so necessary to the physician, and all for want of its education.

As an illustration, I was one day conversing with a physician who was enthusiastically relating to me the details of an operation at which he had assisted. He was very eloquent in describing the various steps of the operation, but when asked concerning the conditions of the organ that had necessitated the operation, he had to admit that he had entirely overlooked that, to him, seemingly an unimportant and trifling detail of the case. The study of the conditions that might require such an operation were to his uneducated but otherwise well-instructed mind matters wholly subordinate and trivial in comparison to the minute knowledge of the technique required to perform the operation itself.

If the present state of affairs becomes much more accentuated and the majority of physicians become only as so many specific operators in certain grooves, there will soon become necessary the office of the purely diagnostician whose province it shall be to well diagnose the disease and decide the character or order of treatment required, be it medical or surgical. It will then be the duty of the diagnostician to well inform himself concerning the various abilities of the various men in his neighborhood and recommend them for specific virtues or abilities as an oculist now does the services of the optician. This will, furthermore, become necessary as a check to the tendency to operate simply for the purpose of making an operative record or to complete a "hundred series," just as a Sioux Indian was wont to go on the warpath on the hunt for some unlucky and unwary Chippeway, simply to add another notch to his tomahawk-handle or rifle-stock.

This will, unless the modern trend of medical instruction changes somewhat, soon become the field of the fast-disappearing, general practitioner, who will there find an ample field for the exercise of his accumulated medical wisdom born of experience and which modern forms of prac-

tice prevent him from putting to any other intelligent use. Such an office was wont to be filled during the war, after a battle, when experienced superior medical officers examined the wounded, detailing the order of operation required in each case, the method and technique of the operation being left to the discretion of the operating staff, who, however, followed the general instructions pinned to the man. This, no doubt, saved many a soldier from suffering a needless operation while it greatly facilitated the labors and lightened the responsibilities of the operators.

Climatological Paradoxes.

Pacific Medical Journal.

It is the sum total of the results of varying meteorological conditions or elements that composes climatic characteristics. It is not the excess or absence of any one element that makes a climate good or bad, but the relative proportions of certain elements formed in combination and acting reciprocally. The climate in the north of Scotland or that on the western Irish coast is surchanged with atmospheric humidity, but the even and comparatively low temperature accompanying that high degree of humidity makes of those regions havens of health and of long life. As observed by Ian MacLaren, when a Highlander dies before eighty or ninety, the relatives look upon it as something reflecting upon the family, and as something requiring an apology or some sort of an explanation. On the other hand, I have seen some of the finest specimens of robust and alert old age coming from the dry, desert regions of northern Africa.

While sunshine is a well-recognized factor in stimulating animal and vegetable life, and in maturing physiological action in the highest degree of functional activity, and while the presence of other and more active meteorological agents will at times quite nullify the beneficent action of the solar rays. Madrid has three times the number of hours of sunshine enjoyed by the Londoners, and yet owing to additional or modifying climatic effects of altitude and of topography, Madrid is as much ahead of London in its number of fatal cases of pneumonia as it is in amount of its sunshine. The Bavarian capital enjoys with the Spanish capital the distinction of being the favorite habitat of pneumonia. Both these cities are situated at higher altitudes than any of the other capitals of Europe.

Spain is said to possess the greatest number of hours of sunshine in Europe, having on an average one-fourth more sunshine than is credited to Italy. Spain has a yearly mean of three thousand hours of sunshine while Italy only has some twenty-three hundred. Germany has some seventeen hundred hours of sunshine during the year, while France comes in between Spain and Italy. The English nation has some three hundred less sunshiny hours than their German cousins, while the southern Irish coast has still less of sunshine than the average of England.

The different topography, absence of high mountains and the humid atmosphere brought by the warm waters of the gulf stream to the Irish and Scottish coasts, even if it does give to the southern Irish coast the greatest average of rain and clouds, and to the Scotch their proverbial fogs and mists, gives to those regions their great exemption from many diseases which afflict the elevated, drier and more sunshiny parts of continental Europe. It is possible, however, that with the high latitudes of Ireland and Scotland, and with the cool and even temperature resulting from their insular positions, that more sunshine would make of them ideal climates and hygienic Edens.

It may well be a question whether Madrid would not be benefited by the interposition of a temperature equalizing blanket of high fog. When we consider its latitude and the effects of the sun of the latitude upon the physique of man in connection with the possible results upon that physique when the solar heat is suddenly abstracted and replaced by chilly mountain blasts, we may believe that the modifying influence of high fogs could not help but act beneficially

even if at the expense of less sunshine.

A very devout man, one who wished to be entirely guarded by scriptural light in all things, once found himself in quite a quandary. He had allowed himself to ponder upon the theological and biblical aspects of having his hair cut. He was not quite sure whether in a biblical sense he should get it cut or let it grow long. He searched the Scriptures with great diligence, and after months of hard research and study found that Sampson got into trouble by having his hair shingled, and that Absalom got a spear through his body and his quietus because he neglected to have his shingled, from which he argued that the Scriptures left this matter to individual expediency, comfort or taste.

The study of climates and their effects on man brings into relief many paradoxical conditions, and after the most careful and painstaking study we often find ourselves in the same state of perplexing uncertainty developed by the student of Scripture for divine light upon the subject of having his hair cut. We cannot always be guided by the amount of sunshine, humidity, cloudiness, cold or heat that a region may possess. We must study these conditions or elements relatively and collectively and avoid all isolating of meteorological conditions, as well as we must take into account the relative topography and physical conditions. The social enviroments must also come in for our share of attention as these may offset, by their psychological influences, all and any purely physical effects derived from climatic conditions.

When Sir Walter Scott wrote his novel placing the scene of the plot in the heart of Midlothian, he opened up that interesting and picturesque part of the British Isles to the notice of the great world of tourists. To such an extent did the tide of travel trend Midlothian-ward as a result of that one book that ungenerous critics hinted at some possible interest in which the great novelist shared connected with the inns or lines of travel in Midlothian as being the mainspring of the book, when in truth Sir Walter was only drawn into using the section as the scenic theater for his story from the picturesqueness and richness of its environments. When Dr. Bennet, of Mentone, first wrote his "Winter and Spring on the Mediterranean," ungenerous critics were not wanting who attributed interested or mercenary motives to the author, who was really only writing his very interesting book from gratitude to a climate that had benefited him and which had given relief to many afflicted ones, as well as from a conscientious desire to enlighten others upon a subject that he had well and fully investigated and was well able to describe. Any writer on climatology who takes for his theme the description of some locality or section must expect, to a certain extent, being classed with guide-book and sectional advertisement writers. If we allow such fears to influence us no section would be ever described.

If our climatologists were to cut loose from any attempt to make any hard and fast lines concerning the therapeutic effects of climates the matter would be greatly simplified. It would not then possibly seem as "scientific," but it would then very assuredly be burdened with more sound common sense. As I have said for many years the rapeutic application of climate to disease is wholly a matter of individual experiment in a specific sense. There are general laws that govern, it is true, but in the end, when it comes to the specific application of climate as a therapeutic agent, we will generally find that the individual idiosyncrasies of the patient must all be taken into account, idiosyncrasies that often produce as erratic results as are witnessed by their play in inducing marriages.

A Note On Bismuthum Tribrom-Phenylicum as a Surgical Antiseptic.

Charles Greene Cumston, B.M.S., M.D., in the Boston Medical and Surgical Journal.

It is difficult to pass an opinion regarding the real value of an antiseptic, because bacteriological experiments are not always in accord with the clinical results obtained. Such, for example, is iodoform, which, theo-

retically is without value, while practical experience demonstrates its great value.

The phenols, such as carbolic acid the chloro-. bromo- and iodo-phenols, cresol, pyrogallol, naphtol, etc., are the most powerful antiseptics, after those of the mineral series, but their use is limited on account of their toxic and caustic properties. These defects disappear if HO is replaced; example, phenol and salicylic acid give by their combination salol.

The reason why salol and other like products give such excellent results when applied to wounds, or the mucous membranes is because they split up into their constituents in a slow and continuous manner, so that when a large surface is covered, the toxic and caustic action of the creosote or corbolic acid does not occur. The phenolates of bismuth easily decompose in presence of the organic liquids, and the amount of phenol liberated is sufficient to give excellent antiseptic results.

Of all the groups of antiseptics, bismuthum tribromphenylicum, or as it is also termed "xeroform," is recognized as the most active; first, because it contains, besides 49 per cent. of oxide of bismuth. 50 per cent. of tribromphenol, while other products only contain from 10 to 20 per cent. of phenol, cresol or naphtol; and, secondly, tribromphenol is more antiseptic than phenol.

Bismuthum tribromphenylicum has for chemical formula C, H. Br,O — Bi — O, and is rapidly decomposed by acids and bases, especially when heated to 110° C. without decomposing and is thus superior to iodoform because it can be sterilized.

It is a fine, yellow, neutral powder, which does not decompose when exposed to light; its odor is slightly carbolic; it is tasteless and does not irritate the mucous membrane of the digestive tract.

Little has been written regarding the surgical applications of this product, but there is no doubt in my mind that it has a large field of usefulness in surgery. In open wounds, those in which no infection has taken place, the tribromphenol of bismuth will secure union by first intention. It appears to exercise a calming influence on burns, like iodoform. In cutaneous affections with secretion of pus, such as impetigo and sycosis. the result obtained with this preparation was not satisfactory. In some cases of *pruritis localis sine materia* the itching was stopped by the application of this product. When applied after the curettement of tubercular abscess or glands, cicatrization was rapid.

On account of the continual development of tribromophenol and oxide of bismuth, a wound will be kept in a perfectly antiseptic condition, while the slightly irritating action of the former gives a fresh and healthy aspect to the wound.

One of the properties of iodoform is to produce granulation tissue; tribromphenolate of bismuth and other antiseptics, such as airol, europhen, iodol, etc., do not have this quality to such a degree; consequently in order to cause granulations to spring up, iodoform should be first applied, and cicatrization can be accomplished with the bismuth product. This method if tried with success in two cases of fistula in ano after having freely opened, excised and curetted the fungous masses.

My experience with the product under consideration amounts in all to twenty-six cases, as follows: five cute of the extremities requiring from three to twelve sutures; one ulcus molle; two operations for bilateral laceration of the cervix; seven curettements for acute gonorrheal endometritis; two cases of vaginitis; tnree operations for tuberculosis of the bones; one abdominal hysteropexy; one tubercular abscess of neck; one sub-aponlurotic abscess of axilla, one appendicitis; and two operations for fistula in ano.

In all these cases it appeared to me that this powder gave more satisfaetion than I have ever had with iodol, europhen, iodoform or tincture of iodine, all of which I have thoroughly tried. In the gynecological cases it appeared to me that this product had a marked influence on the regeneration of the epithelium.

In no case did I meet with any toxic symptoms, although in the cases of tuber-

culosis of the bones and tubercular abscess of the neck in a child eleven months old I applied the powder very freely in the wounds.

In closing this short note I would strongly recommend this substance to the profession as a safe and sure antiseptic, and in many respects superior to iodoform or other powders of this class.

Water in Abundance.

The Cleveland Medical Gazette.

Water in abundance is one of the essentials to the proper performance of all physiological functions. Most persons unquestionably drink too little of it, and the origin or aggravation of many ailments is due to an insufficient supply. Excellent advice is found in an article in *Harper's Bazar*, which is to be commended in every point excepting that of not allowing water during meals. There seeems to be no reason for withholding it then, provided it be of proper temperature and be not allowed to supplant the process of mastication, to aid in swallowing solid food. The article says:

The habit of drinking daily a quantity of water is one that is valuable in many ways. Its importance is seldom emphasized. It is not enough that the child should take an occasional glass of water, or that the babe should be given a teaspoonful as a rarity. But the habit of water-drinking is essential to the well-being of every child. Most children will occasionally ask for water at meals, or will take a swallow of ice-water when they see others drinking, or will enjoy water with lemon or fruit, or jelly or sugar, or flavored with tea or coffee; but water pure and simple it seldom occurs to a child to demand, or to a mother to offer, although of all foods this one is the most important. and no other contributes so directly to the health and growth of the child. The tiniest baby should be given a teaspoonful of water many times during the day; and if at night it takes water from a nursing-bottle, it will require during the several hours no other nourishment. A child two years old may with advantage drink at least a pint of water every twenty-four hours, and a child from three to four years old will not infrequently consume a quart of water in the same time.

All water fed to a child should have been boiled, and must be kept in a bottle or carafe that can be closely stopped. It should neither be warmed nor cooled, but should be given to the child at ordinary temperature as it stands in the living-room. It should always stand in sight of the infant, and within reach of an older child. Where it is necessary to go down-stairs or into another part of the house in order to obtain a drink for the child, it usually has no drink at all except at such times as its thirst becomes intense. It is not necessary or advisable to give water to a child during meals, but at other times it may safely be allowed to drink as often and as much as it will. It may even be encouraged to increase the amount, if the water that is used has first been boiled and is of the proper temperature. We cannot of course force a child to drink, nor is it pleasant to over-urge such a necessary opinion. But by having water always at hand we may make drinking easy. and by providing a pretty cup, or making some merry play, we can go farther and make the drinking of plain water really attractive until the habit is firmly fixed, when it will regulate itself.

PROF. O. SCHMIEDEBERG, of Strassburg University, identified the form into which iron is converted after abstraction from all food in the system, and as stored in the liver and other organs as the reserve iron for blood formation. He then produced this agent and made it available for therapeutic use. The product is *ferratin*, an iron-albuminic acid, a definite chemical product (see *Archiv f. experimentelle Pathologie u Pharmac.*, 23, No. 2 and 3; and other publications).